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LEE & HAYES PLLC 421 W RIVERSIDE AVENUE SUITE 500 SPOKANE, WA 99201			ZIA, SYED	
			ART UNIT	PAPER NUMBER

2131

DATE MAILED: 02/10/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/389,842

Applicant(s)

LEVINE ET AL.

Examiner

Syed Zia

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 October 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-49 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-39 and 44-49 is/are allowed.
- 6) ☒ Claim(s) 40 is/are rejected.
- 7) ☒ Claim(s) 41-43 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

This office action is in response to request for continued examination, and amendment filed on October 09, 2004. Original application contained Claims 1-43. Applicant previously added Claims 44-46, and previously amended Claims 3, 6, 16, 25, and 20. Applicant currently amended Claim 6, 8, and added new claims 47-49. The amendment filed have been entered and made of record. Presently pending claims are 1- 49.

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114.

Applicant's submission filed on October 09, 2004 has been entered.

Response to Arguments

Applicant's arguments filed on October 09, 2004 have been fully considered but they are not persuasive because of the following reasons:

Regarding claim 1, 7, 12, 14, 20, 25, 27, 33, 38, and 40 applicants argued that the cited prior art (CPA) [Maskowitz et al.] does not teach "*tracking a requested signal... wherein the transaction identification data can be derived from the patter* ", "*logically dividing a requested signal into segments... values into each segment*", "*method of embedding... identification data embedded therein*", "*a computer readable... requested composite signal*", "*embedding transaction... embedded therein*", "*transaction identification data...received request*" and "*a computer readable storage medium... embedded in the segment*" as indicated in the claims.

This is not found persuasive. CPA teaches and describes a system and method that involves methods of random noise creation given the necessary consequence of improving signal quality with digitization techniques. Additionally, methods are described for optimizing projections of data redundancy and overhead in error correction methods to better define and generate parameters by which a watermarking system can successfully create random keys and watermark messages that subsequently cannot be located and erased without possession of the key that acts as the map for finding each encoded watermark. This description will provide the backdrop for establishing truly optimized watermark-insertion including: use of nonlinear (chaotic) generators; error correction and data redundancy analysis to establish a system for optimizing key and watermark message length; and more general issues regarding desired quality relating to the importance of subjecting watermarked content to different models when the

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content may be distributed or sold in a number of prerecorded media formats or transmitted via different electronic transmission systems; this includes the use of perceptual coding; particularized methods such as noise shaping; evaluating watermark noise signatures for predictability; localized noise function mimic encoding; encoding signal features; randomizing time to sample encoding of watermarks; and, finally, a statistical method for analyzing composite watermarked content against a master sample content to allow watermark recovery. All of these features can be incorporated into specialized digital signal processing microprocessors to apply watermarks to non-generalized computing devices, such as set-top boxes, video recorders that require time stamping or authentication, digital video disc (DVD) machines and a multitude of other mechanisms that play or record copyrighted content.

Thus, CPA allows implementation of digital watermarks, which are optimally suited to particular transmission, distribution, or storage mediums given nature of digitally sampled audio, video and other multimedia works. Watermark application parameters are adapted to individual characteristics of given sample stream.

As a result, CPA does implement a system in which identifying data can be securely and robustly included in a digitized signal such as audio and video signals such that the identifying data are not perceptible to a human viewer in a particular efficient manner.

Applicants clearly have failed to explicitly identify specific claim limitations, which would define a patentable distinction over prior arts.

The examiner is not trying to teach the invention but is merely trying to interpret the claim language in its broadest and reasonable meaning. The examiner will not interpret to read

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narrowly the claim language to read exactly from the specification, but will interpret the claim language in the broadest reasonable interpretation in view of the specification. Therefore, the examiner asserts that CPA does teach or suggest the subject matter broadly recited in independent claims 1, 7, 12, 14, 20, 25, 27, 33, 28, 40, and 44. Dependent claims are also rejected at least by virtue of their dependency on independent claims and by other reason set forth in the previous office action. Accordingly, rejections for claims 1-46 are respectfully maintained.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-49 rejected under 35 U.S.C. 102(e) as being anticipated by Moskowitz et al.

U. S. Patent No. 6,522,767 ('Moskowitz' hereinafter).

3. With respect to claim 1, Moskowitz teach a method for tracking a requested signal (see abstract), the method comprising: receiving a request for the requested signal, generating transaction identification data which identifies the received request, and including a pattern in the requested signal to form a watermarked signal using a predetermined basis signal, wherein the

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transaction identification data can be derived from the pattern; further wherein the inclusion of the basis signal in the requested signal is designed to introduce no more than a predetermined maximum level of perceptibility to the requested signal (see abstract; col. 2, lines 26-46; col. 3, lines 19-23).

4. With respect to claim 7, Moskowitz disclose a method for enabling embedding of transaction-specific identification data into a requested signal, the method comprising: logically dividing the requested signal into segments (see col. 4, lines 6-17); for each segment, embedding a first logical value in the segment to form a first embedded segment (see col. 4, lines 6-17); embedding a second logical value in the segment to form a second embedded segment (see col. 4, lines 6-17); and including both the first and second embedded segments in a composite signal (col. 4, lines 6-17).

5. With respect to claim 12, Moskowitz disclose a method for embedding transaction-specific identification data into a requested signal (see col. 16, lines 39-45; col. 19, lines 57-61), the method comprising: retrieving a composite signal which includes, for each of one or more corresponding portions of the requested signal, a first marked segment which represents a first logical value embedded in the corresponding portion of the requested signal and a second marked segment which represents a second logical value embedded in the corresponding portion of the requested signal (see col. 1, lines 60-64; col. 2, lines 58-67 to col. 3, lines 19-23); for each of the corresponding portions of the requested signal, selecting segments of the composite signal according to logical values of corresponding bits of the

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transaction-specific identification data (see col. 1, lines 60-64; col. 2, lines 58-67 to col. 3, lines 19-23); and combining the selected segments to form a watermarked signal which includes the transaction-specific identification data embedded therein (see col. 12, lines 6-17; col. 17, lines 18-44).

6. With respect to claim 14, Moskowitz disclose a computer-readable storage medium on which is stored computer code which, when executed by a computer, causes the computer to enable tracking a requested signal by: receiving a request for the requested signal, generating transaction identification data which identifies the received request, including a pattern in the requested signal to form a watermarked signal using a predetermined basis signal, wherein the transaction identification data can be derived from the pattern; further wherein the inclusion of the basis signal in the requested signal is designed to introduce no more than a predetermined maximum level of perceptibility to the requested signal (col. 2, lines 26-46; col. 3, lines 19-23; col. 6, lines 42-52).

7. With respect to claim 20, Moskowitz disclose a computer-readable storage medium on which is stored computer code which, when executed by a computer, causes the computer to enable embedding of transaction-specific identification data into a requested signal by: logically dividing the requested signal into segments, for each segment, embedding a first logical value in the segment to form a first embedded segment, embedding a second logical value in the segment to form a second embedded segment and including both the first and second embedded segments in a composite signal (col. 3, lines 59-67, col. 4, lines 6-17).

8. With respect to claim 25, Moskowitz disclose a computer-readable storage medium on which is stored computer code which, when executed by a computer, causes the computer to enable embedding transaction-specific identification data into a requested signal by: retrieving a composite signal which includes, for each of one or more corresponding portions of the requested signal, a first marked segment which represents a first logical value embedded in the corresponding portion of the requested signal and a second marked segment which represents a second logical value embedded in the corresponding portion of the requested signal (see col. 1, lines 60-64; col. 2, lines 58-67; col. 3, lines 19-23; col. 4, lines 6-17); for each of the corresponding portions of the requested signal, selecting segments of the composite signal according to logical values of corresponding bits of the transaction-specific identification data (see col. 1, lines 60-64; col. 2, lines 58-67; col. 3, lines 19-23; col. 4, lines 6-17); and combining the selected segments to form a watermarked signal which includes the transaction-specific identification data embedded therein (see col. 4, lines 6-17-1; col. 17, lines 18-44).

9. With respect to claim 27, Moskowitz disclose a computer system comprising: a processor, a memory coupled to the processor (see col. 11, lines 21-27), and a watermarker which executes in the processor from the memory and which, when executed, enables tracking of a requested signal by: receiving a request for the requested signal, generating transaction identification data which identifies the received request (see col. 10, lines 62-67 to col. 11, lines 21 -27); and including a pattern in the requested signal to form a watermarked signal using a predetermined basis signal, wherein the transaction identification data can be derived from the

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pattern; further wherein the inclusion of the basis signal in the requested signal is designed to introduce no more than a predetermined maximum level of perceptibility to the requested signal (see col. 2, lines 26-46; col. 3, lines 19-23).

10. With respect to claim 33, Moskowitz disclose a computer system comprising: a processor, a memory coupled to the processor, and a blank watermark which executes in the processor from the memory and which, when executed, enables embedding of transaction-specific identification data into a requested signal by (see col. 10, lines 62-67; col. 11, lines 1-27): logically dividing the requested signal into segments, for each segment, embedding a first logical value in the segment to form a first embedded segment (see col. 4, lines 6-17); embedding a second logical value in the segment to form a second embedded segment (see col. 4, lines 6-17); and including both the first and second embedded segments in a composite signal (see col. 4, lines 6-17).

11. With respect to claim 38, Moskowitz disclose a computer system comprising: a processor, a memory coupled to the processor, and a watermark which executes in the processor from the memory and which, when executed, embeds transaction-specific identification data into a requested signal (see col. 10, lines 62-67; col. 11, lines 1-27) by: retrieving a composite signal which includes, for each of one or more corresponding portions of the requested signal, a first marked segment which represents a first logical value embedded in the corresponding portion of the requested signal and a second marked segment which represents a second logical value embedded in the corresponding portion of the requested signal (see col. 1,

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lines 60-64; col. 2, lines 58-67; col. 3, lines 19-23; col. 4, lines 6-17); for each of the corresponding portions of the requested signal, selecting segments of the composite signal according to logical values of corresponding bits of the transaction-specific identification data (see col. 1, lines 60-64; col. 2, lines 58-67; col. 3, lines 19-23; col. 4, lines 6-17); and combining the selected segments to form a, watermarked signal which includes the transaction-specific identification data embedded therein (see col. 4, lines 6-17; col. 17, lines 18-44).

12. With respect to claim 40, Moskowitz disclose a computer-readable storage medium on which is stored a signal which comprises: one or more segments of a subject signal (see col. 3, lines 50-59); for each of the segments, a first segment instance representing a first logical value of portion of a pattern which is embedded in the segment, and a second segment instance representing a second logical value of the portion embedded in the segment (see col. 3, lines 59-67 to col. 4, lines 1-17).

13. With respect to claim 44, Moskowitz disclose a transaction-specific watermark embedded in requested digital content (see col. 1, lines 60-64; col. 2, lines 58-67; col. 3, lines 19-23; col. 4, lines 6-17).

14. With respect to claim 47, Moskowitz disclose transaction-specific watermark embedded in requested digital content, the watermark being generated by one or more processors signal (see abstract) configured to perform acts of signal:

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generating transaction identification data identifying a received request, including a pattern in the requested digital content to form a watermarked signal using a predetermined basis signal, wherein the transaction identification data can be derived from the pattern, wherein including is designed to introduce no more than a predetermined maximum level of perceptibility to the requested digital content (col. 2, lines 26-46; col. 3, lines 19-23; col. 6, lines 42-52).

15. Claim 2 rejected as above in rejecting claim 1, where including comprises: retrieving the basis signal, and including the basis signal in the requested signal to form the watermarked signal in such a manner that the pattern is embedded in the watermarked signal and can be recognized in the watermarked signal (see col. 1, lines 60-64; col. 2, lines 58-67 to col. 3, lines 1-9).

16. Claim 3 rejected as above in rejecting claim 2, wherein including the basis signal comprises: logically dividing the basis signal into segments, and for each segment of the basis signal, adding the segment of the basis signal to a corresponding segment of the requested signal upon a condition in which a corresponding portion of the pattern has a first logical value (see col. 3, lines 59-67 to col. 4, lines 6-17), and subtracting the segment of the basis signal from the corresponding segment of the requested signal upon a condition in which the corresponding portion of the pattern has a second logical value (see col. 3, lines 59-67 to col. 4, lines 6-17).

17. Claim 4 rejected as above in rejecting claim 1, further comprising: sending the watermarked signal in response to the request for the requested signal (see col. 3, lines 59-67 to col. 4, lines 6-17).

18. Claim 5 rejected as above in rejecting claim 1, wherein including comprises: selecting watermarked signal fragments representing a first logical value for corresponding portions of the pattern which have the first logical value (see col. 4, lines 6-17; col. 17, lines 18-44); selecting watermarked signal fragments representing a second logical value for corresponding portions of the pattern which have the second logical value (see col. 4, lines 6-17; col. 17, lines 18-44); and combining the watermarked signal fragments representing the first and second logical values to form the watermarked signal (see col. 4, lines 6-17; col. 17, lines 18-44).

19. Claim 6 rejected as above in rejecting claim 5, wherein the watermarked signal fragments are compressed such that combining the watermarked signal fragments comprise the watermarked signal in a compressed form (col. 17, lines 18-27).

20. Claim 8 rejected as above in rejecting claim 7, further comprising: for each of the segments of the requested signal (col. 3, lines 50-59): selecting from first and second embedded segments of the composite signal according to a corresponding bit of the transaction-specific identification data (col. 4, lines 6-17).

21. Claim 9 rejected as above in rejecting claim 8, further comprising: combining the selected embedded segments of the composite signal to form a watermarked signal which

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includes the transaction-specific identification data embedded therein (see col. 4, lines 6-17; col. 18, lines 18-44).

22. Claim 10 rejected as above in rejecting claim 7, wherein including both the first and second embedded segments in a composite signal comprises: including the first embedded segment in a first frame, compressing the first frame to form a first compressed frame, including the second embedded segment in a second frame, compressing the second frame to form a second compressed frame, and including both the first and second compressed frames in the composite signal (see col. lines 6-17; col. 17, lines 18-27).

23. Claim 11 rejected as above in rejecting claim 10, wherein including both the first and second embedded segments in a composite signal further comprises: determining that the first and second compressed frames are equivalent; and including a single compressed frame in the composite signal to represent both the first and second compressed frames (see col. 4, lines 6-17; col. 17, lines 18-26; col. 18, lines 1-6).

24. Claim 13 rejected as above in rejecting claim 12, wherein the first and second marked segments are compressed such that watermarked signal formed by combining the selected segments is compressed (see col. 17, lines 18-27).

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25. Claim 15 rejected as above in rejecting claim 14, where including comprises: retrieving the basis signal, and including the basis signal in the requested signal to form the watermarked signal in such a manner that the pattern is embedded in the watermarked signal and can be recognized in the watermarked signal (see col. 1, lines 60-64; col. 2, lines 58-67 to col. 3, lines 1-9).

26. Claim 16 rejected as above in rejecting claim 15, wherein including the basis signal comprises: logically dividing the basis signal into segments, and for each segment of the basis signal, adding the segment of the basis signal to a corresponding segment of the requested signal upon a condition in which a corresponding portion of the pattern has a first logical value (see col. 3, lines 59-67; col. 4, lines 6-17); and subtracting the segment of the basis signal from the corresponding segment of the requested signal upon a condition in which the corresponding portion of the pattern has a second logical value (see col. 3, lines 59-67; col. 4, lines 6-17).

27. Claim 17 rejected as above in rejecting claim 14, wherein the computer code, when executed by the computer, further causes the computer to enable tracking a requested signal by: sending the watermarked signal in response to the request for the requested signal (see col. 3, lines 59-67, and col. 4, lines 6-17).

28. Claim 18 rejected as above in rejecting claim 14, wherein including comprises: selecting watermarked signal fragments representing a first logical value for corresponding portions of the pattern which have the first logical value (see col. 4, lines 6-17; col. 17, lines 18-44); selecting

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watermarked signal fragments representing a second logical value for corresponding portions of the pattern which have the second logical value (see col. 4, lines 6-17; col. 17, lines 18-44); and combining the watermarked signal fragments representing the first and second logical values to form the watermarked signal (see col. 4, lines 6-17; col. 17, lines 18-44).

29. Claim 19 rejected as above in rejecting claim 18, wherein the watermarked signal fragments are compressed such that combining the watermarked signals fragments forms the watermarked signal in a compressed form (see col. 17, lines 18-27).

30. Claim 21 rejected as above in rejecting claim 20, wherein the computer code, when executed by the computer, further causes the computer to enable embedding of transaction-specific identification data into a requested signal by: for each of the segments of the requested signal, selecting from first and second embedded segments of the composite signal according to a corresponding bit of the transaction-specific identification data (see col. 3, lines 10-22, 59-62; and col. 4, lines 6-17).

31. Claim 22 rejected as above in rejecting claim 21, wherein the computer code, when executed by the computer, further causes the computer to enable embedding of transaction-specific identification data into a requested signal by combining the selected embedded segments of the composite signal to form a watermarked signal which includes the

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transaction-specific identification data embedded therein (see col. 4, lines 6-17; col. 10, lines 18-51).

32. Claim 23 rejected as above in rejecting claim 20, wherein including both the first and second embedded segments in a composite signal comprises including the first embedded segment in a first frame, compressing the first frame to form a first compressed frame, including the second embedded segment in a second frame, compressing the second frame to form a second compressed frame, and including both the first and second compressed frames in the composite signal (see col. 4, lines 6-17; col. 17, lines 18-27).

33. Claim 24 rejected as above in rejecting claim 23, wherein including both the first and second embedded segments in a composite signal further comprises: determining that the first and second compressed frames are equivalent; and including a single compressed frame in the composite signal to represent both the first and second compressed frames (see col. 4, lines 6-17; col. 17, lines 18-26; col. 18, lines 1-6).

34. Claim 26 rejected as above in rejecting claim 25, wherein the first and second marked segments are compressed such that watermarked signal formed by combining the selected segments is compressed (see col. 17, lines 18-27).

35. Claim 28 rejected as above in rejecting claim 27, where including comprises: retrieving the basis signal, and including the basis signal in the requested signal to form the watermarked

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signal in such a manner that the pattern is embedded in the watermarked signal and can be recognized in the watermarked signal (see col. 1, lines 60-64; col. 2, lines 58-67 to col. 3, lines 1-9).

36. Claim 29 is rejected as above in rejecting claim 28, wherein including the basis signal comprises: logically dividing the basis signal into segments, and for each segment of the basis signal, adding the segment of the basis signal to a corresponding segment of the requested signal upon a condition in which a corresponding portion of the pattern has a first logical value (see col. 3, lines 59-67 to col. 4, lines 6-17); and subtracting the segment of the basis signal from the corresponding segment of the requested signal upon a condition in which the corresponding portion of the pattern has a second logical value (see col. 3, lines 59-67 to col. 4, lines 6-17).

37. Claim 30 rejected as above in rejecting claim 27, wherein the watermarker, when executed, enables tracking of a requested signal by also: sending the watermarked signal in response to the request for the requested signal (see col. 3, lines 59-67 to col. 4, lines 6-17).

38. Claim 31 rejected as above in rejecting claim 27, wherein including comprises: selecting watermarked signal fragments representing a first logical value for corresponding portions of the pattern which have the first logical value (see col. 4, lines 6-17; col. 17, lines 18-44); selecting watermarked signal fragments representing a second logical value for corresponding portions of the pattern which have the second logical value (see col. 4, lines 6-17; col. 17, lines 18-44); and

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combining the watermarked signal fragments representing the first and second logical values to form the watermarked signal (see col. 4, lines 6-17; col. 17, lines 1844).

40. Claim 32 rejected as above in rejecting claim 31, wherein the watermarked signal fragments are compressed such that combining the watermarked signals fragments forms the watermarked signal in a compressed form (see col. 17, lines 18-22).

41. Claim 34 rejected as above in rejecting claim 33, further comprising: for each of the segments of the requested signal, selecting from first and second embedded segments of the composite signal according to a corresponding bit of the transaction-specific identification data (see col. 3, lines 10-22, 59-62; col. 4, lines 6-17).

42. Claim 35 rejected as above in rejecting claim 34, wherein the blank watermarker, when executed, enables embedding of transaction-specific identification data into a requested signal by also: combining the selected embedded segments of the composite signal to form a watermarked signal which includes the transaction-specific identification data embedded therein (see col. 4, lines 6-17; col. 10, lines 18-51).

43. Claim 36 rejected as above in rejecting claim 33, wherein including both the first and second embedded segments in a composite signal comprises: including the first embedded segment in a first frame, compressing the first frame to form a first compressed frame, including

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the second embedded segment in a second frame, compressing the second frame to form a second compressed frame, and including both the first and second compressed frames in the composite signal (see col. 4, lines 6-17; col. 17, lines 18-27).

44. Claim 37 rejected as above in rejecting claim 36, wherein including both the first and second embedded segments in a composite signal further comprises: determining that the first and second compressed frames are equivalent; and including a single compressed frame in the composite signal to represent both the first and second compressed frames (see col. 4, lines 6-17; col. 17, lines 18-26; col. 18, lines 1-6).

45. Claim 39 rejected as above in rejecting claim 38, wherein the first and second marked segments are compressed such that water-marked signal formed by combining the selected segments is compressed (see col. 17, lines 18-27).

46. Claim 41 rejected as above in rejecting claim 40, wherein two or more segments of the subject signal are represented in a composite frame and further wherein the composite frame includes the following frame instances:

(i) the first segment instance of a first of the two or more segments of the composite frame and the first segment instance of a second of the two or more segment of the composite frame (see col. 4, lines 1-31; col. 14, lines 26-44);

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(ii) the first segment instance of the first segment of the composite frame and the second segment instance of the second segment of the composite frame (see col. 4, lines 1-31; col. 14, lines 26-44);

(iii) the second segment instance of the first segment of the composite frame and the first segment instance of the second segment of the composite frame (see col. 4, lines 1-31; col. 14, lines 26-44); and

(iv) the second segment instance of the first segment of the composite frame and the second segment instance of the second segment of the composite frame (see col. 4, lines 1-31; col. 14, lines 26-44). 47.

47. Claim 42 rejected as above in rejecting claim 41, wherein the frame instances (i) through (iv) are compressed (see col. 17, lines 18-27).

48. Claim 43 rejected as above in rejecting claim 40, wherein the first and second segment instances or each of the segments are compressed (see col. 17, lines 18-27).

49. Claim 45 rejected as above in rejecting claim 44 wherein the watermark is embedded in a carrier wave transporting the requested digital content via a network to a party who requested the digital content (col.6 line 40 to col. 7 line 10).

50. Claim 46 rejected as above in rejecting claim 44 wherein two or more segments of a

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signal representing the requested digital content are included in a composite frame; and further wherein the composite frame includes:

- (i) a first segment instance of a first of the two or more segments of the composite frame and the first segment instance of a second of the two or more segment of the composite frame (see col. 4, lines 1-31; col. 14, lines 26-44);
- (ii) the first segment instance of the first segment of the composite frame and the second segment instance of the second segment of the composite frame (see col. 4, lines 1-31; col. 14, lines 26-44);
- (iii) a second segment instance of the first segment of the composite frame and the first segment instance of the second segment of the composite frame (see col. 4, lines 1-31; col. 14, lines 26-44); and
- (iv) the second segment instance of the first segment of the composite frame and the second segment instance of the second segment of the composite frame (see col. 4, lines 1-31; col. 14, lines 26-44).

51. Claim 48 rejected as above in rejecting claim 47, wherein the watermark is transporting the requested digital content via a embedded in a carrier wave transporting the requested digital content via a network to a party who requested (col.6 line 40 to col. 7 line 10).

52. Claim 49 rejected as above in rejecting claim 47, wherein two or more segments of a signal representing the requested digital content are included in a composite frame; and further wherein the composite frame includes

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- (i) a first segment instance of a first of the two or more segments of the composite frame and a first segment instance of a second of the two or more segment of the composite frame (see col. 4, lines 1-31; col. 14, lines 26-44);
- (ii) the first segment instance of the first segment of the composite frame and a second segment instance of the second segment of the composite frame (see col. 4, lines 1-31; col. 14, lines 26-44);
- (iii) a second segment instance of the first segment of the composite frame and the first segment instance of the second segment of the composite frame (see col. 4, lines 1-31; col. 14, lines 26-44); and
- (iv) the second segment instance of the first segment of the composite frame and the second segment instance of the second segment of the composite frame (see col. 4, lines 1-31; col. 14, lines 26-44).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Syed Zia whose telephone number is 571-272-3798. The examiner can normally be reached on 9:00 to 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz Sheikh can be reached on 571-272-3795. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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SZ
January 28, 2005

Andrew Caldwell
Andrew Caldwell